

Amendment to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application. Canceled claims have been canceled without prejudice.

Listing of Claims:

1. (Currently amended) An expression vector to express human follicle stimulating hormone (FSH) comprising

a gene encoding human FSH ~~consisting of wherein the gene consists of~~

human FSH beta subunit gene having the sequence of ~~SEQ-ID-No.2~~ SEQ ID NO:2,

internal ribosomal entry site (IRES) sequence having the sequence of ~~SEQ-ID-No.7~~ SEQ ID NO:7, and

~~alpha~~ human FSH alpha subunit gene having the sequence of ~~SEQ-ID-No.1~~ SEQ ID NO:1;

a promoter sequence of early gene of cytomegalovirus (CMV) having the sequence of ~~SEQ-ID-No.8~~ SEQ ID NO:8;

a tripartite leader sequence of adenovirus having the sequence of ~~SEQ-ID-No.9~~ SEQ ID NO:9;

a polyadenylation motif sequence of early gene of SV40 virus having the sequence of ~~SEQ-ID-No.13~~ SEQ ID NO:13, and/or a polyadenylation motif sequence of bovine growth hormone (BGH) gene having the sequence of ~~SEQ-ID-No.14~~ SEQ ID NO:14; and

a dihydrofolate reductase (DHFR) gene having the sequence of ~~SEQ-ID-No.12~~ SEQ ID NO:12,

wherein the vector expresses FSH beta and alpha subunits that form a glycosylated FSH heterodimer.

2-7. (Canceled)

8. (Original) A recombinant transformant mass-producing human FSH prepared by introducing the expression vector of claim 1 into host cells.

9. (Canceled)
10. (Previously presented) A recombinant transformant DPF^cC325 (Accession No: KCLRF-BP-00082) mass-producing human FSH prepared by introducing the expression vector of claim 1 into a Chinese hamster ovary (CHO) originated cell line (CHO/dhfr⁻) harboring a damaged dihydrofolate reductase (DHFR) gene.
11. (Previously presented) A method for mass-production of human follicle stimulating hormone comprising the following steps of:
- 1) transfecting host cells with the expression vector of claim 1;
 - 2) selecting recombinant transformants transfected in step 1);
 - 3) selecting a recombinant transformant stably producing human FSH from the recombinant transformants selected in the step 2); and
 - 4) obtaining human FSH from the culture of the recombinant transformant selected in step 3).
12. (Canceled)
13. (Previously presented) The method for mass-production of human follicle stimulating hormone as set forth in claim 11, wherein the host cell of step 1) is a CHO originated cell line (CHO/dhfr⁻) harboring damaged dihydrofolate reductase (DHFR) gene.
- 14-17. (Canceled)
18. (New) An expression vector to express human follicle stimulating hormone (FSH) comprising
- a gene encoding human FSH wherein the gene consists of
 - human FSH beta subunit gene having the sequence of SEQ ID NO:2,
 - internal ribosomal entry site (IRES) sequence having the sequence of SEQ ID NO:7, and

human FSH alpha subunit gene having the sequence of SEQ ID NO:1,
sequentially in 5' to 3' direction;
a promoter sequence of early gene of cytomegalovirus (CMV) having the sequence of
SEQ ID NO:8;
a tripartite leader sequence of adenovirus having the sequence of SEQ ID NO:9;
a polyadenylation motif sequence of early gene of SV40 virus having the sequence of
SEQ ID NO:13, and/or a polyadenylation motif sequence of bovine growth hormone (BGH)
gene having the sequence of SEQ ID NO:14; and
a dihydrofolate reductase (DHFR) gene having the sequence of SEQ ID NO:12,
wherein the vector expresses FSH beta and alpha subunits that form a glycosylated
FSH heterodimer.